

**AMENDMENTS TO THE SPECIFICATION:**

**Please amend the paragraph bridging pages 1 and 2, beginning at page 1, line 25, as follows:**

Thereafter, I and Q output signals, respectively, of the mixers 101 and 102 are further shifted in phase by further  $90^\circ$  with respect to each other by, for example, a  $+45^\circ$  for phase shifter 105 and a  $-45^\circ$  for phase shifter 106, ~~respectively~~. Resulting I and Q output signals are added in an adder circuit 107. As a result, signal components of "requested" sidebands obtained from these two output signals reinforce each other. On the other hand, signal components of "image" sidebands cancel each other.

**Please amend the paragraph bridging pages 2 and 3, beginning at page 2, line 23, as follows:**

In the conventional technique, a CR lattice circuit is used in each phase shifter. Since the CR lattice circuit is current-driven by a constant current source, however, power dissipation becomes high. The reason will be described now. It is desired that values of capacitors C1 and C2 and resistors R1 and R2 of the CR lattice circuit are determined so as to satisfy the following equations,

$$C1R1 = (1 - \cos \alpha) / 2 \pi f \sin \alpha$$

$$C2R2 = (1 + \sin \alpha) / 2 \pi f \cos \alpha$$

where f is the IF operation frequency. In the case where the IF operation frequency is large, it becomes necessary to make values of the capacitors C1 and C2 and resistors R1 and R2 of the phase shifter small. Therefore, the input impedance of the phase shifter becomes small. It is

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thus necessary to set a large drive current value. ~~That is the reason, which is~~ why the power dissipation becomes high.

**Please amend the paragraph beginning at page 3, line 10, as follows:**

Furthermore, in the conventional technique, each phase shifter includes a transistor pair and a current source. The transistor pair and the current source may cause noise and distortion. If [[the]] noise or the like occurs, the noise figure of the image rejection mixer becomes large and the reception sensitivity becomes worse in some cases. Reduction of [[the]] noise and distortion is therefore demanded.

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